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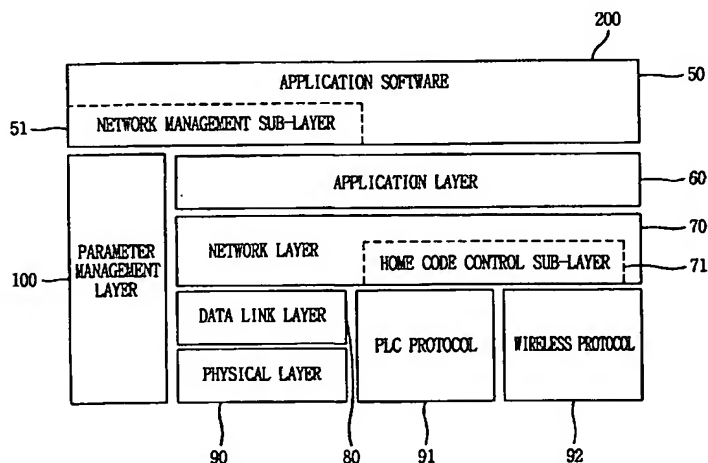
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(54) Title: HOME NETWORK SYSTEM



(57) Abstract: The present invention discloses a home network system using a living network control protocol. The home network system includes: a network based on a predetermined protocol; at least electric device connected to the network; and a network manager connected to the network, for controlling and/or monitoring the electric device, wherein the protocol includes an application layer (60) for handling a message for controlling and monitoring the electric device, a network layer (70) for network-connecting the electric device to the network manager, a data link layer (80) for accessing a shared transmission medium, and a physical layer (90) for providing a physical interface between the electric device and the network manager, wherein the physical layer (90) further includes a special protocol for providing an interface with a dependent transmission medium, and the network layer (70) further includes a home code control sub-layer (71) for managing a home code for network security when accessing the dependent transmission medium.



ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

IPC⁷: H04L 12/26, 12/46, 29/06

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC⁷: H04LDocumentation searched other than minimum documentation to the extent that such documents are included in the fields searched
—Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
WPI, EPODOC, PAJ, Elsevier, IEE, I3E, IEEEExplore

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	Koon-Seok Lee, Hoan-Jong Choi, Chang-Ho Kim, Seung-Myun Baek, 'A new control protocol for home appliances-LnCP.' In: International Symposium on Industrial Electronics, 2001. Proceedings. ISIE 2001. 12-16 June 2001 pages: 286 - 291 volume 1	1-49
X	Yi-Min Wang; Russel, W.; Arora, A.; JunXu; Jagannathan, R.K.; 'Towards dependable home networking: an experience report.' In: Proceedings International Conference on Dependable Systems and Networks, 2000. DSN 200025 - 28 June 2000, Los Alamitos, CA, USA, IEEE Computer Society pages: 43 - 48	1-49

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